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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,907	08/23/2001	Michael Schweigert	5369/00007	1006

7590 11/20/2003

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EXAMINER

AFTERGUT, JEFF H

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 11/20/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

CLD 10

<b>Office Action Summary</b>	Application No. 09/935,907	Applicant(s) SCHWEIGERT, MICHAEL	
	Examiner Jeff H. Aftergut	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.  
     4a) Of the above claim(s) 7-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
     a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                         | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____   |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) - | 6) <input type="checkbox"/> Other:  |

Art Unit: 1733

*Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-6, drawn to a process of making a wound bobbin of dental tape, classified in class 156, subclass 169+.
  - II. Claims 7-11, drawn to a bobbin of dental tape, classified in class 132, subclass 321.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process such as one where the desired tack was imparted upon the tape by merely heating at the point of laydown wherein the tensioning device employed was controlled from the supply of the tape (and not in the line prior to winding). Additionally, one could apply heat to the bobbin in order to impart the desired tack to the filament tape.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper. The applicant is additionally advised that there is an

Art Unit: 1733

associated search burden with the examination of both the method and the article in the same application as the manipulative steps performed do not weigh in the patentability of the article of manufacture.

5. During a telephone conversation with Earnest Linek on 10-29-03 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-6. Affirmation of this election must be made by applicant in replying to this Office action. Claims 7-11 have been withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Prospero et al.

The admitted prior art suggested that it was known at the time the invention was made to provide a coated tape for dental floss (page 2, lines 13-24 of the specification) wherein the same was wound upon a bobbin or other support for consumer use utilizing conventional bobbin winding operations, page 3, lines 1-22. The applicant suggested that it was known to wind the coated tape upon a bobbin under tension and under such conditions that the tape was tacked to the previously wound layers of material. the admitted prior art suggested that the problem associated with the conventional bobbin winding operations was that they did not provide for

Art Unit: 1733

uniform tensioning of the coated tape in the winding operation and did not properly condition the tape as the tape was being wound upon the bobbin to achieve the desired tack without production of bobbins which are "out of rounds", "squashed bobbins" or "bulging bobbins" which were produced as a function of usage of conventional winding techniques where the tension on the tape altered during winding and the heating (conditioning) adversely effected both the winding and the coating on the tapes.

Prospero et al suggested that it was known to provide a dental tape winding operation with a mechanism which tensioned the dental floss material with uniform tension during the winding operation. The tensioning device was provided with a means to heat the tensioning device in such a fashion that as the coated dental floss material traveled through the tensioning device, wax build-up (the coating on the dental floss) did not occur. Additionally the reference appeared to suggest that the device was capable of operation at high speeds without having to stop the operation as a function of the heating of the tape as the same was fed through the tensioning mechanism. Such is taken as evidenced by Prospero to have been a conventional tensioning mechanism in bobbin winding of dental floss material. additionally, because the tensioning mechanism was heated, it in effect, conditioned the dental floss material in the same manner as that recited in the claims. The applicant is more specifically referred to column 1, lines 51-62 where the reference expressly stated that wax was removed from the thread in the known prior art bobbin winding operations which were winding dental floss. The reference avoided the same via heating the tensioning mechanism such that as the coated floss material passed through the device no wax build up occurred, see column 3, lines 30-40. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate

Art Unit: 1733

the tensioning mechanism of Prospero et al in the bobbin winding operation of the admitted prior art for winding a coated tape upon a bobbin as such would have allowed for continuous operation of the process.

With respect to claim 2, note that the reference suggested that one skilled in the art would have heated the tensioning mechanism, thereby providing a heated surface over which the tape was fed. The reference to Prospero was silent as to the specific amount of heat applied and the resulting tack of the tape coating, however, as suggested by the admitted prior art the tack would have been sufficient to join the tape to the bobbin and/or the additional windings applied thereto. One skilled in the art would have modified the operation to attain the desired tack by controlling the degree of heating of the coating on the tape. Regarding claim 3, the reference to Prospero suggested that the heating was controlled at the tensioning device. Regarding claims 5 and 6, the applicant has admitted that the specified dental floss tapes were known at the time the invention was made. The applicant is additionally advised that those skilled in the art at the time the invention was made would have controlled the degree of tack via the heat applied to the tape (including heat from the tensioning mechanism). It clearly impacted whether there was coating remaining upon the tape. The amount of heat applied would have been optimized in order to attain sufficient tack for the tape in the wound bobbin.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as set forth above in paragraph 7 further taken with Gruber.

While the references suggested that one skilled in the art would have heated the tensioning mechanism such that the coating would have slid off of the tensioning mechanism without the build up of wax, there is no express suggestion that the dental floss would have been

Art Unit: 1733

heated at the point of laydown. The art is replete with examples of heating at the point of laydown during a winding operation in order to adhere the previously wound layer to the newly wound layer as evidenced by Gruber. More specifically, Gruber suggested that those skilled in the art at the time the invention was made would have known to apply heat to the guide mechanism (in order to allow the resin coated filaments to slide over the same without fuzzing and/or material build-up at the guide, see heated guide 20, column 1, lines 20-38) as well as heat at the point of laydown with an infrared heater 22'. Those skilled in the art would have understood that an open flame or a hot air heater would have been an alternative heat source at the point of laydown and the use of radiant heaters, lasers or radio frequency are all taken as alternatives in the art of heating at the point of laydown. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate an additional heat source at the point of laydown in order to adequately tack down the coated tapes onto the previously wound layers on the bobbin as suggested by Gruber in the operation as set forth above in paragraph 7.

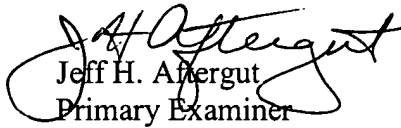
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff H. Aftergut whose telephone number is 703-308-2069. After December 18, 2003, the examiner can be reached at 571-272-1212. The examiner can normally be reached on Monday-Friday 6:30-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 703-308-3853. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1733

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
Jeff H. Aftergut  
Primary Examiner  
Art Unit 1733

JHA  
November 17, 2003